



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/685,451	10/16/2003	Po-Chao Tan	OP-092000246	5416				
46103 HDSL 4331 STEVENS BATTLE LANE FAIRFAX, VA 22033	7590 05/10/2007		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>GILMAN, ALEXANDER</td></tr></table>		EXAMINER	GILMAN, ALEXANDER		
EXAMINER								
GILMAN, ALEXANDER								
			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2833</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	2833		
ART UNIT	PAPER NUMBER							
2833								
			<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>05/10/2007</td><td>PAPER</td></tr></table>	MAIL DATE	DELIVERY MODE	05/10/2007	PAPER	
MAIL DATE	DELIVERY MODE							
05/10/2007	PAPER							

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/685,451

Applicant(s)

TAN ET AL.

Examiner

Alexander D. Gilman

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the conductive filament must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-3 recite "hard terminal with one end connected to a soft electric wire."

A term "hard terminal" is not discussed in the specification. The hard material cannot be interpreted as a hard terminal since it is not conductive. The mechanism of a signal transferring from the measuring terminal to the soft wire at the buffering structure is not claimed.

It is unclear how the hard terminal (a term terminal means - an end-) can be disposed on a full length of the test probe. It is also unclear why claims 1-5 claim "a tail structure" while a test probe components are claimed.

Claim 3, claims "snapping mechanism" meaning "a protrusion". However, a term mechanism is an arrangement of connected parts in a machine". One element is not a mechanism.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nightingale et al in view of O'Hara et al or Domingues

With regard to claims 1, 4, 5, Nightingale et al (US Des. 344,681) disclose a tail structure of an electric wire, comprising a hard terminal with one end connected to a soft electric wire; a buffering structure

wrapping around a junction of the hard terminal and the soft electric wire;

Nightingale et al explicitly do not disclose soft layer wrapping around the hard terminal, wherein the soft layer extends across the buffering structure to the soft electric wire, such that the buffering

structure and a part of the soft electric wire are wrapped thereby.

O'Hara et al (US 5,061,892) disclose (col. 2, lines 64-68) the soft layer (made from plastic) extends across the buffering structure to the soft electric wire.

Domingues (US 4,790,768) discloses (col. 2, lines 59-62) the soft layer (made of elastomer, which can be a rubber) extends across the buffering structure to the soft electric wire.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Nightingale et al with the soft layer, as taught by O'Hara et al or Domingues, to for insulation and strain relief.

Art Unit: 2833

With regard to claim 2, Nightingale et al when modified by O'Hara et al or Domingues disclose (Nightingale et al) that the hard terminal includes the other end serving as a measuring terminal.

With regard to claim 3, Nightingale et al when modified by O'Hara et al or Domingues disclose (Nightingale et al) that the hard terminal includes a snapping mechanism protruding therefrom. It would be obvious to include a hole formed in the soft layer to engage with the snapping mechanism.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nightingale et al in view of Dittman or Domingues or Cinibulk.

With regard to claim 6, the admitted prior art (Spec, Fig. 1) disclose a testing probe, comprising: a hand-held portion; a measuring terminal protruding from a first end of the hand-held portion; a soft electric wire connected to a second end of the hand-held portion, the soft electric wire being electrically connected to the measuring terminal; a buffering structure wrapping a junction between the hand-held portion and the soft electric wire, the buffering structure having a predetermined softness allowing the soft electric wire wrapped thereby to bend therewith.

The admitted prior art does not disclose a removable soft layer wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire.

Dittman (US 4,702,710) disclose a removable soft layer (22) wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire

Domiguess (US 4,790,768) disclose a removable soft layer (33) wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire

Cinibulk et al (US 5,226,837) disclose a removable soft layer (24) wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire.

Art Unit: 2833

Wihdwor (US 2,430,593) disclose a removable soft layer (24) wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the admitted prior art with the soft layer, as taught by Dittman or Domiguess or Cinibulk or Windsor , for insulation and strain relief.

With regard to claims 7 and 8 the admitted prior art disclose the hand-held portion is fabricated from hard insulation material and a conductive filament extending from the measuring terminal to a bare portion of the soft electric wire within the hand-held portion (since the pror art being modified with a soft layer only.

With regard to claim 9 the prior art-Dittman disclose that the removable soft layer is secured to the hand-held portion by at least one snapping mechanism (42) .

Response to Arguments

Applicant's arguments filed 7/20/2004 have been fully considered but they are not persuasive.

Applicants argue that Nightingale et al. discloses an exterior design of a head assembly for a switchable electrical test probe. The design includes a terminal portion, a switching portion on which a switch is formed, a tail portion of the switching portion, and a wire protruding from the tail portion. Nightingale et al. does not disclose the electric wire being a soft electric wire.

Nightingale et al. does not specify any of these portions being a hard terminal, a buffering structure, or a buffering structure of the junction of the hard terminal and the soft electric wire, either. Nightingale et al. does not disclose any "snapping mechanism" at all.

However, drawings and pictures can anticipate claims if they clearly show the structure which is claimed. In re Mraz, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972). However, the

Art Unit: 2833

picture must show all the claimed structural features and how they are put together.

Jockmus v. Leviton, 28 F.2d 812 (2d Cir. 1928). The origin of the drawing is immaterial. For instance, drawings in a design patent can anticipate or make obvious the claimed invention as can drawings in utility patents. When the reference is a utility patent, it does not matter that the feature shown is unintended or unexplained in the specification. The drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art. In *re Aslanian*, 590 F.2d 911, 200 USPQ 500 (CCPA 1979). In this case, *Nightingale et al*, disclose "a head assembly for a switchable electrical test probe."

As it could be understood due to the 112 problem, it was assumed that a hard terminal is combination of a measuring terminal and a conductive structure transferring signals from measuring terminal to the wire. A switch movably attached to the conductive structure was considered a snapping mechanism. It is necessary to have a hole in the soft layer to access the switch.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2833

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4/17/2007



**ALEXANDER GILMAN
PRIMARY EXAMINER**